



Installing the ACT D'MAND KONTROLS® System ALL ACT 2 MODELS

Installations shall be in accordance with the manufacturer's instructions per the requirements of the
Uniform Plumbing Code (UPC)
Conforms to UL STD 508
Certified To CSA STD C22.2 #14

ATTENTION!

DO NOT plug the power cord into an electrical outlet for more than 10 seconds, until the System is installed and in place. Operation of the System without being plumbed into water lines may burn out the pump prematurely and void the warranty.

Attention Builders: Installed pumps connected to water will need to be activated and run through a cycle at least once every 30 days, or the pump impeller may seize in position. Contact ACT Inc. with questions on how to troubleshoot a pump if you suspect this has occurred at (800) 200-1956.

Pre-Installation Checklist

1. Check the package contents. Refer to Pg. 21 for your Model Number and its contents.

2. Make sure you have the tools to do the job:

- Pipe wrenches or adjustable crescent wrenches.
- Small Philips head screwdriver
- Drill, 5/8" drill bit and 3/16" drill bit.
- Teflon Tape or Pipe Dope
- Pliers or Wire strippers (optional – Used to cut wires and/or strip insulation from wires)

3. Determine where you will install the ACT D'MAND KONTROLS® System:

Typically, the ACT2-RETROFIT-BTKIT should be at the fixture farthest away from the water heater. The ACT2 can be installed on a dedicated return line near the water heater as well.

NOTE: If your hot water supply line runs in two or more separate directions from the water heater, you may need more than one ACT D'MAND KONTROLS® System to satisfy all your hot water requirements.

Caution: The D'MAND KONTROLS® System may NOT be installed outdoors, or in an environment where water may contact the outside of the System.

4. Verify the ACT Inc. D'MAND KONTROLS® System works before installation:

- 1) Plug the ACT D'MAND KONTROLS® pump into ACT D'MAND KONTROLS® controller.
- 2) Plug ACT D'MAND KONTROLS® controller into an 110V electrical outlet.
- 3) Pump should begin running.
- 4) **When you have confirmed the System works, disconnect and continue with the normal installation.**

ACT 2 Installation Instruction
Video



**COMING
SOON!**

Getting to know the ACT  KONTROLS® Controller
(M C US 12)



Assembling your new ACT 2 pump

NOTE: It is essential that the appropriate unions are placed on the correct sides of the pump, otherwise the pump will NOT operate.

Identify the pump components (see pg. 21): Each ACT2 comes complete with a sensor/inlet SS union and an outlet union.

1. *Sensor Inlets include:* Stainless Steel nipple, brass union connector, and a black washer. This can be easily identified by the wire threaded into the top of the part.
2. *Sensor Outlets include:* SS union/nipple, which includes an integrated check valve, brass union connector, and a black washer.

Videos now available! See below for instructional videos.

How the D'MAND® System works



Installing your ACT Retrofit Kit



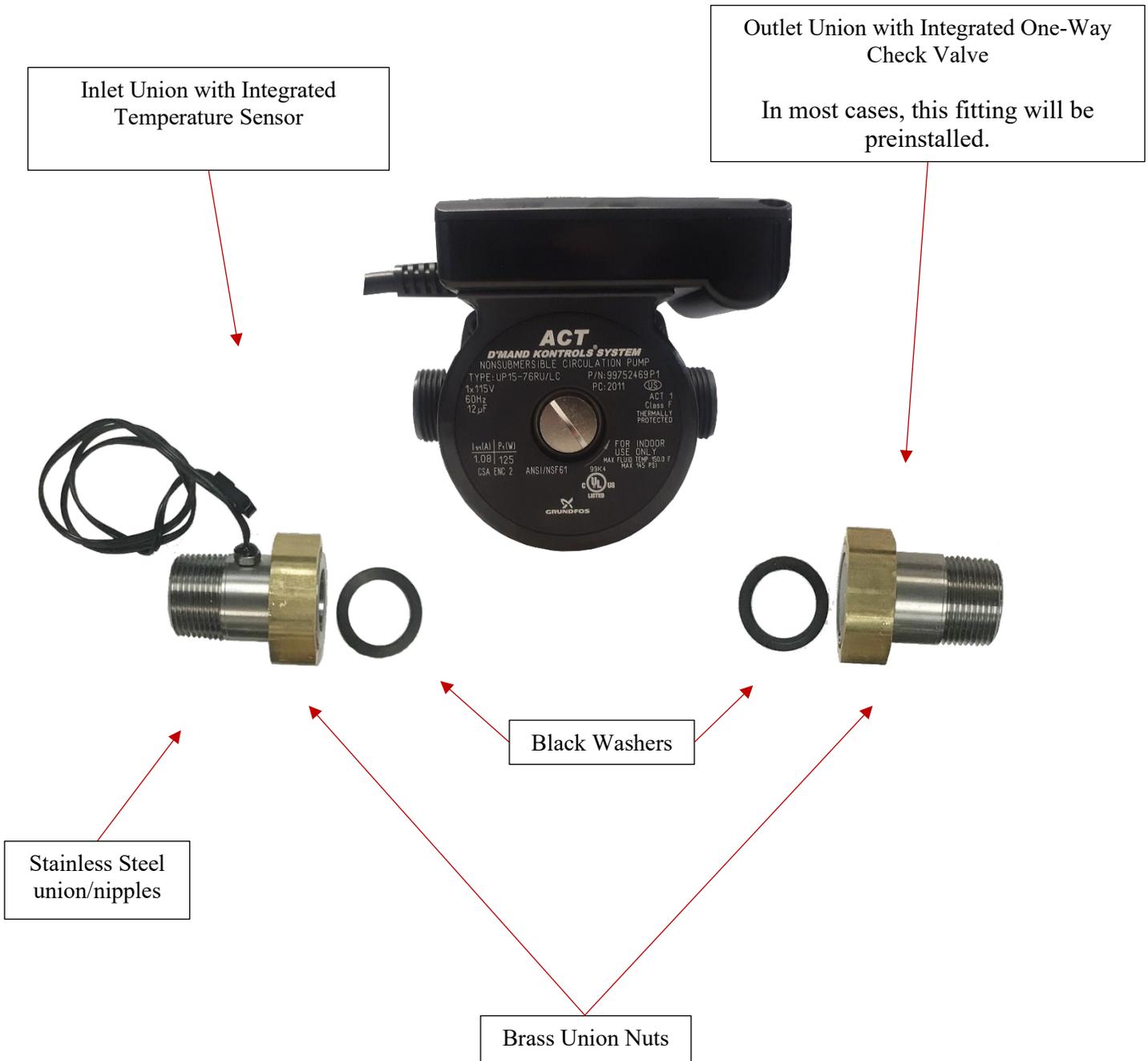
Adding extra Bluetooth accessories



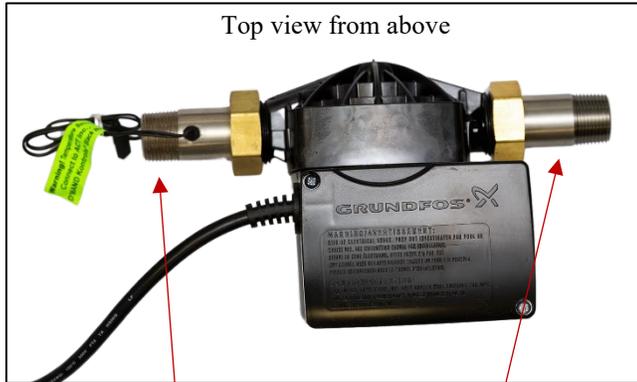
NEW VIDEOS COMING SOON!

Assembling the fittings/unions to the pump.

1. Begin by placing the washer in the brass nut pre-installed on the inlet union, then securing the union to the pump by threading the brass nut to the inlet/left side of the pump. Hand tighten plus a $\frac{1}{4}$ - $\frac{1}{2}$ turn with an adjustable wrench or until the washer makes a good water seal.
2. Next repeat the same procedure for the outlet side of pump, place the washer in the brass nut pre-installed on the outlet SS union, then securing the union to the pump by threading the brass nut to the outlet/right side of the pump. Hand tighten plus a $\frac{1}{4}$ - $\frac{1}{2}$ turn with an adjustable wrench or until the washer makes a good seal. **NOTE: DO NOT OVERTIGHTEN!**

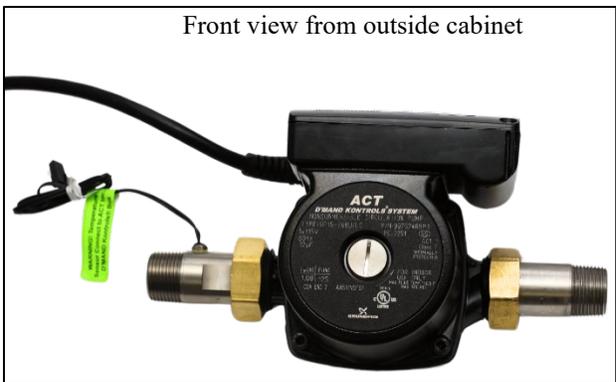


When finished the completed pump should look like this: (See below)



Inlet Side

Outlet Side



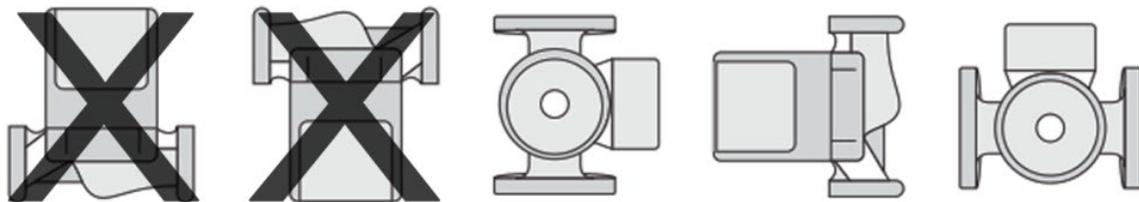
Water Flow Direction 

IMPORTANT: If the Stainless-Steel Unions are NOT installed on the correct side, the pump WILL NOT operate or move water.

3. Once the unions are properly installed, prep the 3/4" MIP threads with Teflon for water connections. (See below)



Pump position



Viewed facing the installed pump.

Place the pump in the cabinet

- 1) Install the ACT D'MAND Controls® pump/cylinder in the **horizontal** position as show above.
- 2) Be sure the arrow on top of the pump points left to right (hot water to cold water side) prior to connecting flex lines or adapters.

Note: Placement of the pump in a vertical position will decrease the life of the D'MAND KONTROLS® pump and result in an increased noise level. Use of any parts other than the supplied D'MAND KONTROLS® parts, including check valves or flex lines, may restrict and delay the flow of water from the water heater, and possibly void the warranty. Please refer to our website at www.gothotwater.com for warranty and indemnification information.

UNDER SINK INSTALLATION

Installing the D'MAND Controls® System with the PF-KIT-BLUE TEE

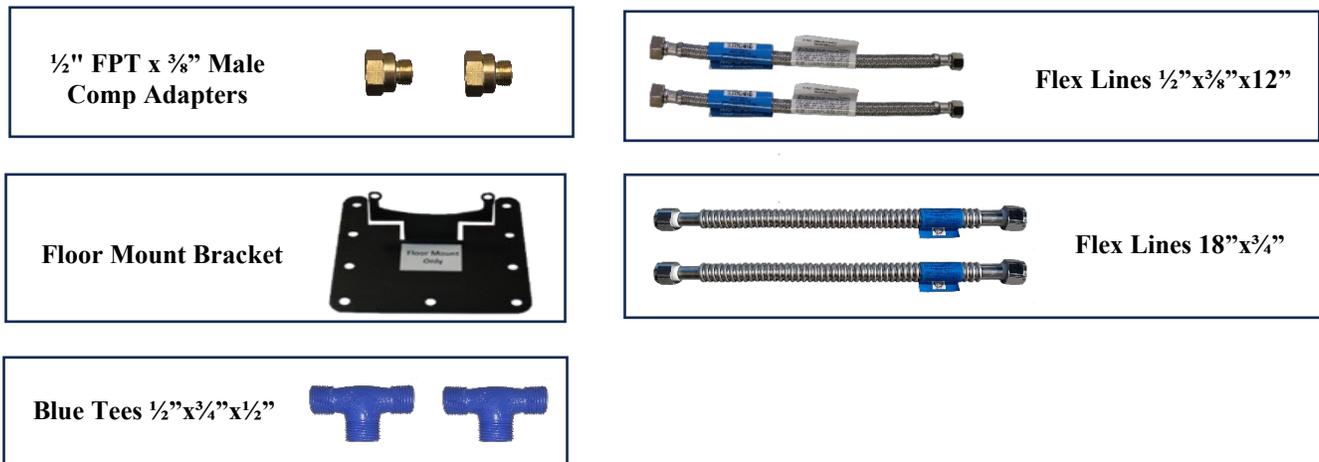
The pre-fab installation package (PF-KIT-BLUE TEE) is designed to simplify the installation of the D'MAND KONTROLS® System to ½" copper hot and cold supply lines underneath a sink.

The Blue Tee Kit includes:

- Two (2) custom Blue Tees ½" x ½" x ¾" MIP thread
- Two (2) Flex Lines 18" x ¾" FIP
- Two (2) ⅜" comp x ½" FIP x 12" long Flex Lines
- Two (2) ½" FPT x ⅜" Male Comp Adapters (see illustration on next page)

Note: Additional pipe thread fittings may be required if your supply lines are threaded galvanized or CPVC plastic pipe. Call 1-800-200-1956 for assistance.

To Install the Custom Blue Tee Kit:



1. Turn off angle stops on both the hot and the cold sides where the System will be installed. If you cannot completely shut off the water flow, then you will need to turn off the house water supply.
2. Starting on the left/hot side, disconnect faucet flex line from angle stop. (See Fig. 1)

3. Pre-tape all MPT (Male Pipe Thread) fittings with either approved Teflon tape or pipe dope (not included).
4. Determine if you have either $\frac{3}{8}$ " compression angle stops or $\frac{1}{2}$ " pipe thread angle stops. This will determine which flex line the $\frac{3}{8}$ " x $\frac{1}{2}$ " adapter is connected to.
 - If you have $\frac{3}{8}$ " angle stops then the adapters will install on to the blue tee on the flex line attached to the sink.
 - If you have $\frac{1}{2}$ " angle stops then the adapters will install on to the blue tee and connect to the flex line connected to the angle stop.
5. Pre-assemble flex lines to the Blue Tee. ($\frac{1}{2}$ " connections on top and $\frac{3}{4}$ " connections on drop/bottom). Install the coupling nut on the appropriate end. Ensure firm watertight seals on all fittings. (See Fig. 2a and 2b)

Fig. 2a
(Shown: $\frac{3}{8}$ " angle stop configuration)

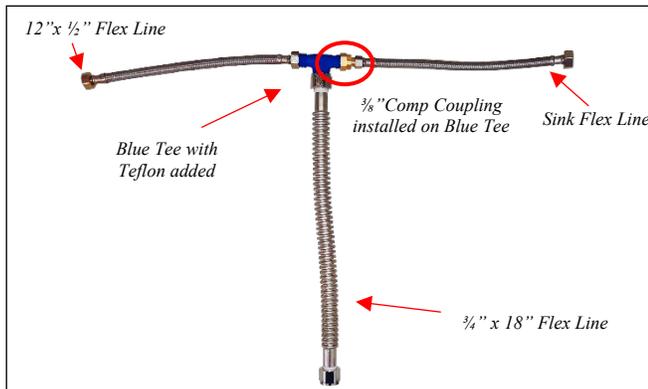
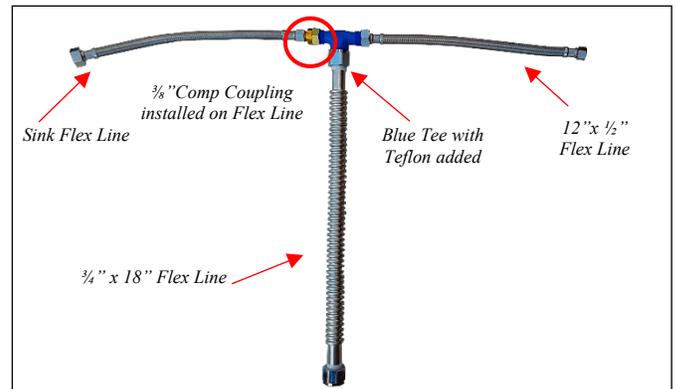
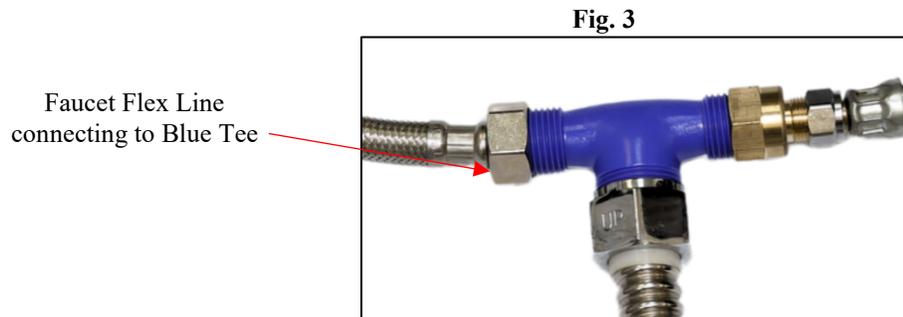


Fig. 2b
(Shown: $\frac{1}{2}$ " angle stop configuration)

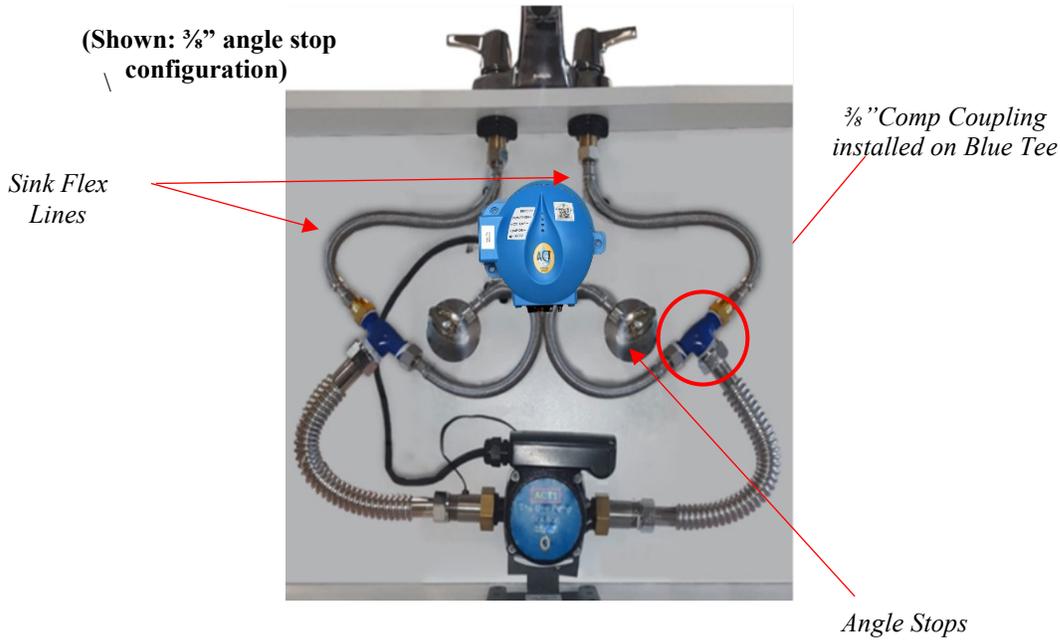


6. Connect the faucet flex line that was disconnected from the angle stop to the unused side of the Blue Tee. (See Fig. 3)



7. Next, connect the other 12"x $\frac{3}{8}$ " flex line with the compression coupling back on to the angle stop. (Fig. 3 above)
8. Connect $\frac{3}{4}$ " flex line to the side of the $\frac{3}{4}$ " MIP of the ACT2 pump SS union. (If the unions have not been installed on the pump, please refer back to the pump installation instructions for the proper installation)
9. Repeat steps 1-8 for the right/cold side.
10. Ensure that all the washers make a firm and watertight seal on EVERY connection.

11. The final installation should look similar to this:



Connecting the ACT D'MAND Kontrols® Control Box:

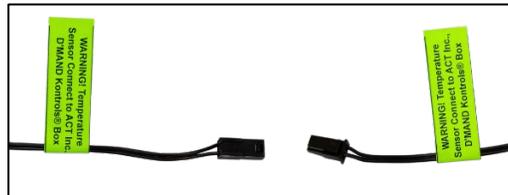
- 1) Ensure the D'MAND Kontrols® control box is installed using the screws and anchors (included) to an adjacent flat surface close to the pump.
- 2) **See page 12 for mounting instructions for D'MAND KONTROLS® controller.**
- 3) Connect D'MAND Kontrols® pump power cord to receptacle in D'MAND KONTROLS® controller.
- 4) Connect the plug adapter to the pump power cord before the connecting to the control box.

Note: Systems should always be installed on an AC power line that includes circuit breakers.



Connecting the Temperature Sensor

Locate the sensor wire from the top of the pump, (see picture below), and the black plastic end connector. This will need to be attached to the connector from the D'MAND KONTROLS® controller box. This will allow your pump to sense water temperature differential in the water line.



IMPORTANT! Failure to connect the temperature sensor will cause the System to malfunction

Install Activation Accessories

Button

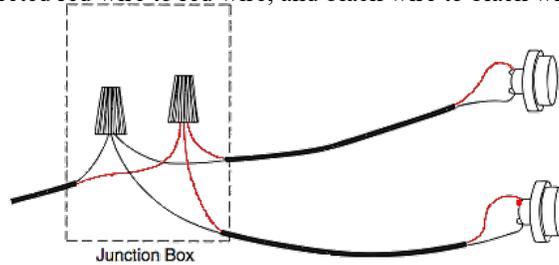
- 1) Drill a $\frac{5}{8}$ " hole in the face of the cabinet where the D'MAND KONTROLS® pump is installed.
- 2) Place a Button Plate over the hole.
- 3) Feed the two (2) wire cable through the $\frac{5}{8}$ " hole and the Button Plate. Secure the Plate and Button in place with screws.



- 4) Connect the red and black wires on the Hard-Wired Button to the two-red and black wires connected to the Control Box. Make sure they are connected red wire to red wire, and black wire to black wire.



LED Button



- 5) Cap any wires not in use.

Note: Both LED Buttons and LED Rocker Switches are available for purchase.



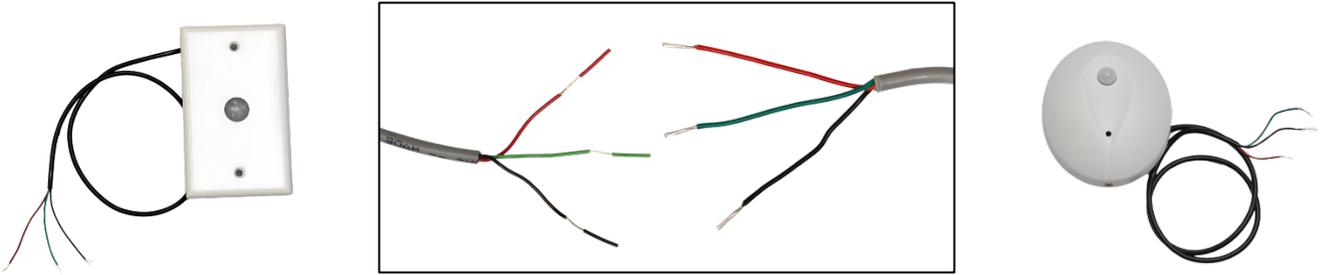
LED Button shown installed in BP-W (Optional)



LED Rocker Switch installed in wall plate

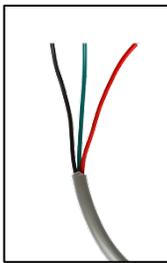
Hard-Wired Motion Sensor Activation

- 1) Connect the three (3) wire cable with the color-coded wires from the D'MAND KONTROLS® pump to the three wires on the accessory. Example: red to red, green to green, and black to black.



- 2) Make sure to use the three (3) wire nuts provided to cap the connections.

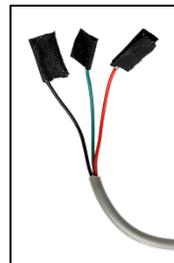
Note: Make sure to cut, cap, or tape any wire leads not in use (two (2) wire cable only). Failure to do so can cause the pump to run erroneously. When covering the wire leads in tape, make sure none of the leads are touching.



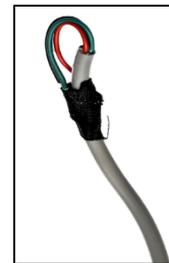
Cut



Cap



Tape



Tape

Once all the wires from the DMAND Kontrols® pump are connected, plug the pump into the three prong 110v outlet. Note: The pump will start and run one (1) cycle if there is no hot water at the pump.

Using the D'MAND Kontrols® System:

The D'MAND Kontrols® System will run only until hot water is present. Once hot water is at the pump, the System will shut down and remain dormant until both following conditions are met:

1. The water cools down.
2. The user activates the pump.

The D'MAND Kontrols® System will NOT run if:

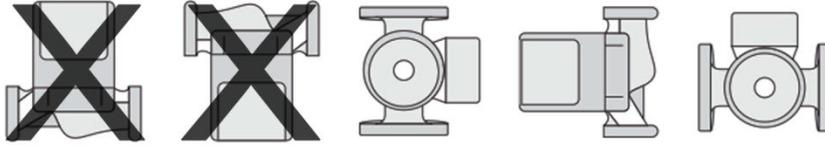
1. There is hot water at the pump.
2. The user does not activate the pump.

DEDICATED RETURN LINE INSTALLATION

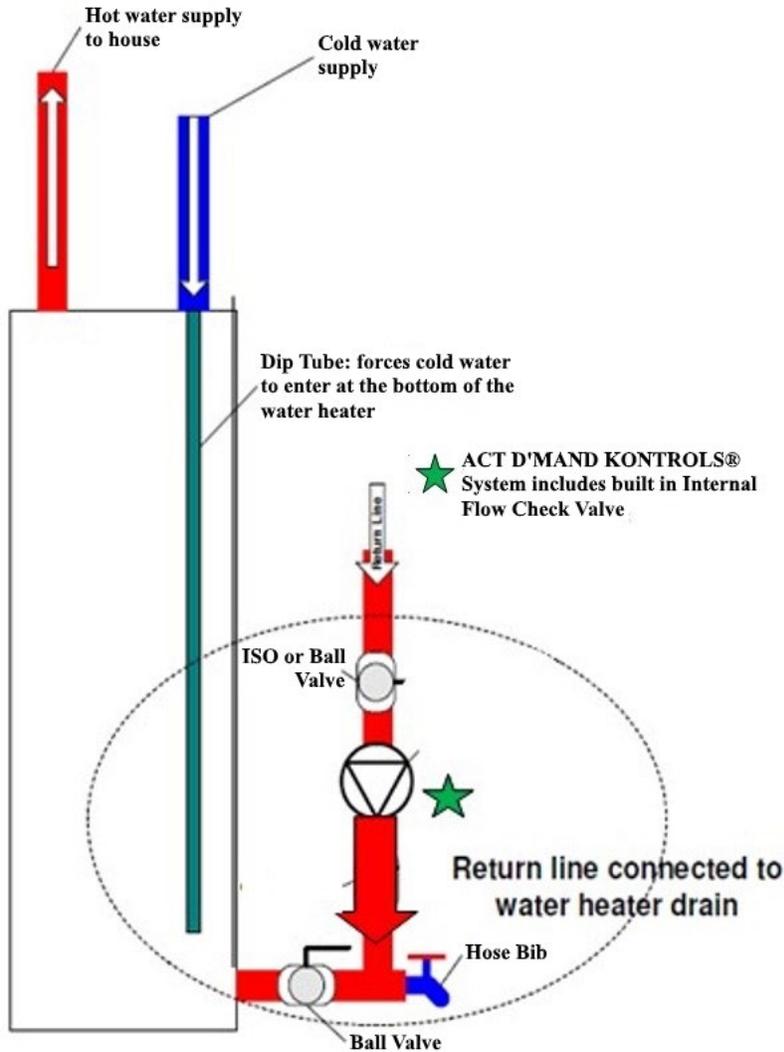
Installing the ACT D'MAND Kontrols® System

The D'MAND Kontrols® System can be installed at any location on the dedicated return line.

Pump Position:



Viewed facing the installed pump.

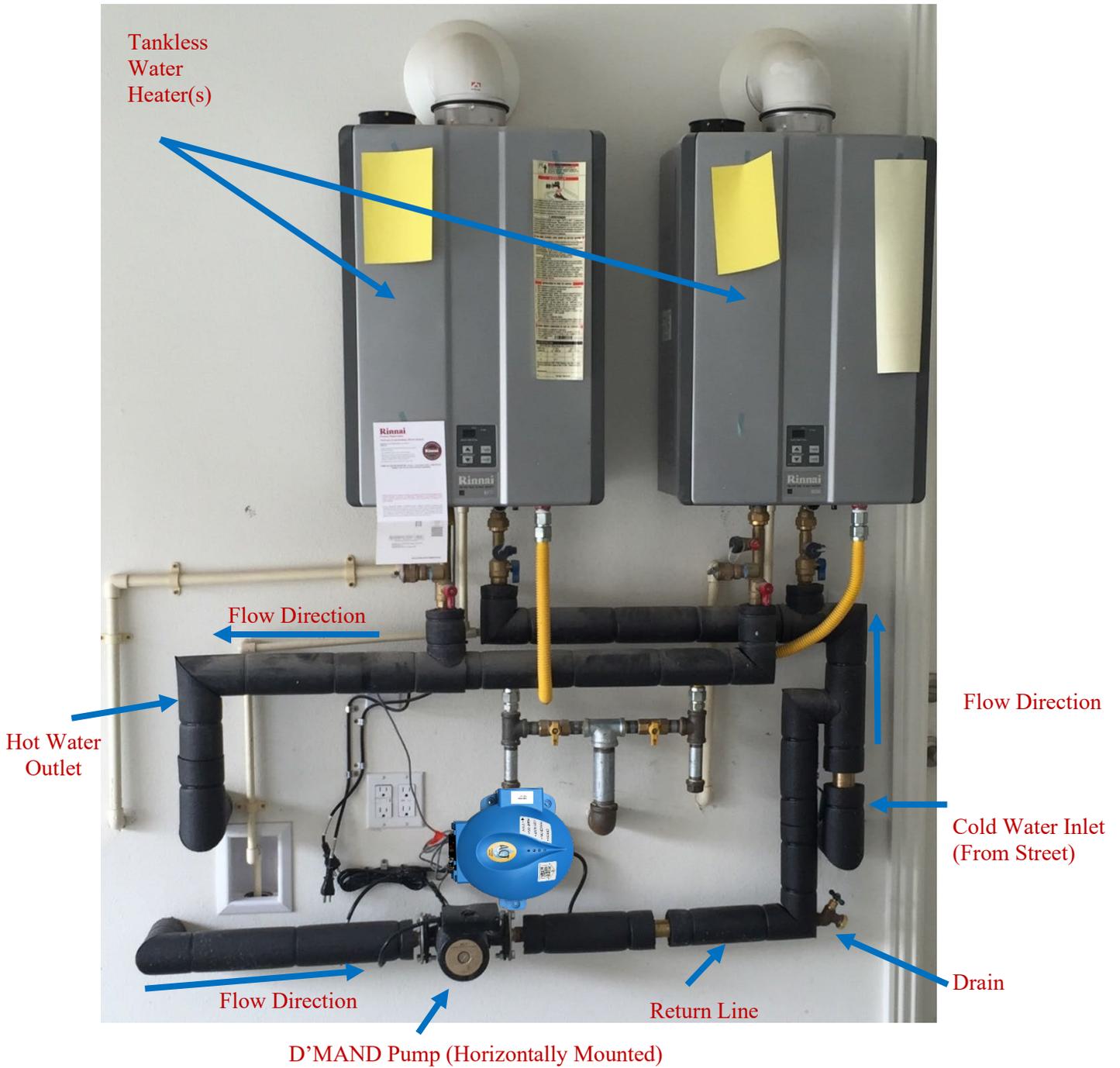


- 1) Ensure that the pump is not installed directly above the water heater or within 18". This may cause the unit to detect the heated water in the tank and not function as desired.
- 2) Orientate the unit with the flow direction arrow pointed towards the water heater.
- 3) Place the motor/cylinder in a horizontal position to ensure the unit is quiet and has the maximum life.

Recommendation: Purge any air by installing isolation valves in front and behind the pump. A drain valve will also make any maintenance quick and simple. (See diagram, left).

Note: ACT D'MAND Kontrols® System has 3/4" MIP thread fittings on either side of the pump which will need to be adapted to the existing plumbing line. Pipe sealant or Teflon tape is recommended to ensure there are no leaks. Once the unit is plumbed into the return line, proceed to connecting the activation accessories

Recommended installation on return line



Using the D'MAND Kontrols® System:

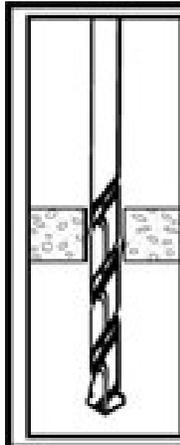
For information, see same heading on bottom of page 9.

ACT 2 Control Box Wall Installation Instructions

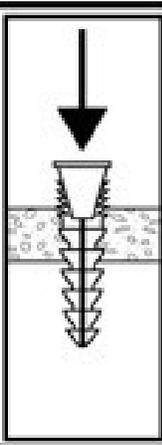
Step 1



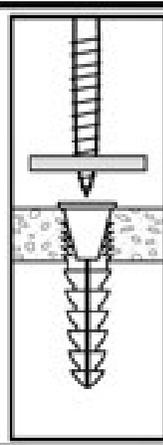
Step 2



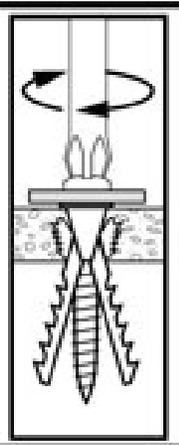
Step 3



Step 4



Step 5



Installation Steps:

- 1) Place the ACT, Inc. D'MAND Controls® System blue control box against wall and mark all three (3) holes with a pencil.
- 2) Drill out all three (3) holes in drywall with 3/16" drill bit.
- 3) Insert the three (3) plastic drywall anchors into each of the holes.
- 4) Place blue control box over the anchors aligning the "ears" with the installed anchors.
- 5) Place screws (included) in each of the anchors, firmly affixing the box to the wall.

Do not over tighten!

*Note: If the wall is not drywall, then the anchors may not be necessary.

Using your ACT 2 D'MAND® System

The ACT2 D'MAND® System represents the latest evolution of the Original D'MAND® System, a trusted solution for water and energy conservation for over three decades.

There are three (3) methods to activate your ACT2 D'MAND® System. (1) Hardwiring D'MAND® Systems with the two-wire lead. (2) Hardwired motion sensors with the 3-wire lead. (3) Activation through the ACT, Inc. D'MAND Kontrols® Free App.

1. **Hardwired Activation:** Utilizing either Hardwired Buttons or Motion Sensors, this method offers reliability and ease of use. Each ACT2 D'MAND® System is equipped with a 2-wire lead for momentary contact Button activation, with the option to incorporate patented LED hardwired Buttons for visual feedback. The LEDs will light up ONLY when the pump is running and shut off when the pump motor is off. Additionally, a 3-wire lead (red, black, and green) enables integration with Hardwired Motion Sensors, facilitating up to 12 sensors per controller.
2. **Wireless Bluetooth Activation:** The ACT2 D'MAND® System features an integrated Bluetooth Receiver, allowing seamless activation through the ACT, Inc. D'MAND KONTROLS® Free App. This app, available for download on both Apple App Store and Google Play Store, grants users access to control their System remotely via smartphone. Account creation requires only an email address and password, enabling users to manage multiple devices and add new components such as Bluetooth Transmitters, Receivers, Motion Sensors, and Signal Repeaters. Moreover, multiple users can access the System through their Bluetooth-enabled smart devices. For systems already equipped with a Bluetooth device, account setup is streamlined, allowing immediate access to functionalities.
3. **LED Indicators:** The ACT2 controller is equipped with LED indicators on the front, providing visual feedback regarding System status.

Programming your ACT 2 D'MAND® System to the ACT D'MAND® System App.

Baseline settings: The ACT2 D'MAND® System controller has the following factory settings that work best in all but a few homeowner installations. They optimize the efficiency and performance of the system. They are as follows.

- **Run Time:** Baseline of 5 minutes maximum.
- **Pump Temperatures:** Pump turn on temperature (Commercial only) 45°F, Pump cut off high limit 103°F, De-freeze Temperature 45°F (Cold Start only).
- **Mode Selection:** Residential
- **Startup Pump State:** ON

These settings can be altered with several more adjustments. We will start with the residential ACT2 blue controller. These are done with the ACT, Inc. D'MAND Kontrols® Free App.

ACT2 Programming Guide



NEW VIDEO COMING SOON!

1. Once the Free App has been downloaded onto your Bluetooth-enabled smart device and you have logged in your account, you can start your ACT2 D'MAND® System by selecting the icon of the blue controller as shown here:



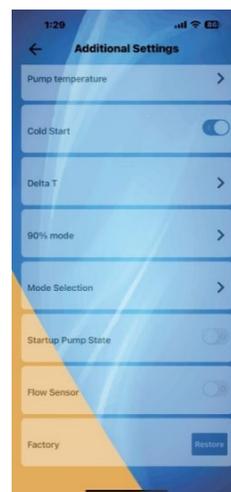
2. By adhering to the provided instructions, you can seamlessly incorporate any Bluetooth accessories into your account to enable System activation. It is important to note that these items are designed for integration with any existing hardwired accessories.
3. Specifically, the ACT2 D'MAND® System's blue controller offers advanced "Additional Settings" that enable customization of operational parameters. Presented here in sequential order are these customizable options.

Advanced Settings/Additional Settings TABS explained:

1. Go to the “MY D'MAND®” page and click on “Controller”. Then click “Options” in the top right corner and go to “Additional Settings.” (see below)



- a. There will be several options in the pull-down menu, as shown below:



In sequential order from top to bottom of the menu, each tab corresponds to a specific function. Shown below is an image illustrating its features, followed by a comprehensive definition and explanation.



Transmitter and Motion Sensor options: These first two tabs are replicated from the main screen. These buttons allow you to Link or De-Link Transmitters or Motion Sensors to the controller.



Run Time: This allows the user to determine the MAXIMUM run time of the pump per activation. You can set it from 1- 15 minutes and 0-59 seconds. Keep in mind, the pump will still only run when the water is not hot. Once hot it will turn off irrespective of this setting. If the water does not reach temperature, THEN it will time out based on this setting.



Schedule: This allows the user to schedule specific “start” or “on” times in the residential mode only. Commercial mode will ignore these settings. You can set times to start or force a stop by toggling on or off next to the time. Hours, minutes, and seconds can all be set, along with a specific day or days. Keep in mind the System will still stop when hot water is detected. Typically, you would ONLY need to set a start time. When the System has cycled, it will turn off when detecting hot water, despite the designated schedule.



Pump Temperature: “Pump Turn On Temperature” is for use in Commercial mode ONLY. In Residential mode, the Pump Temperature Cut Off can be set from 90°F – 140°F. Keep in mind this is ONLY the MAXIMUM temperature limit.



Cold Start: This allows the controller to start at a designated pump temperature in the Pump “Turn On” setting above. This establishes a lower limit to the temperature and will start when it drops to this setting. To adjust this temperature, do so in the “Pump Temperature” tab above.



Delta T: Enable/Disable, this is the ACT D'MAND® patented technology that turns the System on or off when there is a significant rise or drop in temperature. Each number (1-20) represents a 1 degree rise or drop in temperature. The default setting is a Cut Off rate of 6°F, and a turn on rate of 14°F.



90% mode: This is also known as pulse mode. When activated, you will get a constant on and off cycle until turned off. The default setting is 6 minutes on and 1 minute off. When enabled, this will IGNORE ALL OTHER SETTINGS, and run the System at these intervals until it is disabled.



Mode Selection: This tab toggles the controller between Residential mode and Commercial mode.



Startup Pump State: This tab determines if the pump starts when plugged in or power is interrupted. The default is OFF, which means that when the System loses power, or is initially plugged in it will NOT start until triggered by an activation device. In the ON setting the System will run every time it is plugged in, or power is interrupted through a smart plug or similar device.



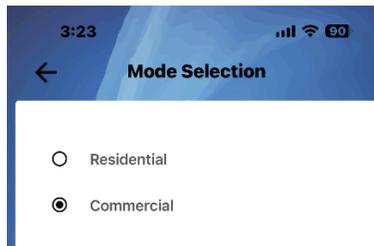
Flow Sensor: This is reserved for an external Commercial flow sensor when used in the Commercial mode.



Factory: This restores the controller to the factory settings and defaults.



The D'MAND Circ® Commercial Mode



The ACT2 D'MAND® System also offers the ability to control recirculation pumps that are in a light commercial setting. This controller can be used with pumps that pull a 4-amp maximum or less. In HP this is normally 1/12 hp or less. This is available through ACT Inc. in the SS3-200 models as well.

Note: ACT Inc. D'MAND Circ® can greatly improve the efficiency of most hot water recirculation systems. To do that the plumbing has to be in good condition and well maintained. Caution: If there are large temperature drops in the return line or cross-overs in the plumbing we do not recommend installing the controller until those issues are resolved. Not doing so can prevent adequate hot water delivery.

What's different in D'MAND Circ® Commercial mode?

In the above *Residential* mode, the D'MAND® System defaults to the “OFF” position and the user starts the System with a variety of activation methods.

In the Commercial mode setting, the D'MAND Circ® Controller defaults to “ON” and runs until the line heats up which shuts the Controller down, waiting for the line to cool before restarting.

Why does it operate this way?

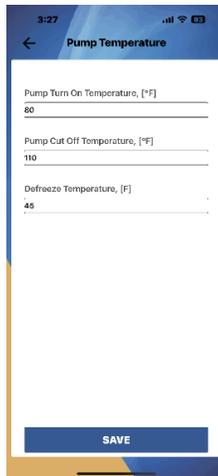
The reason for this is that commercial boilers with return lines are typically significantly longer and have larger piping. To ensure all the occupants have access to hot water on a timely basis in the entire building, there needs to be a baseline setting to make sure the water temperature never drops below a designated limit and then recharge the hot water line with the hot water. This allows the pump to remain off when the residents are using hot water frequently. The ACT Inc. D'MAND Circ® Controller will run more in off hours when the patrons are not using hot water. (i.e. 11pm – 5:30am). A typical logged cycle would be run for 2-3 minutes every 15 minutes, on a well-maintained plumbing system with no hot water use inside the building.

How to set your D'MAND Circ® Controller in Commercial mode.

1. Go to the Mode Selection tab in additional settings and tap on *Commercial*. This will negate most of the tabs because the Controller will always default to “ON”.



2. Next click on the “Pump Temperature” tab. This will allow you to set the upper and lower limit of the sensor. Recommended settings are below, but they are adjustable.



Keep in mind that you are adjusting only the temperature back at the end of the return line where the pump is located. Typically, this will be the length of the structure from the last hot water outlet. So, by the time water reaches this point it will have passed the last fixture on the line. To maximize the efficiency, it is often recommended to keep this temperature as low as possible to lessen the run time.

NOTE: Once these adjustments are made in the app, the D'MAND Circ[®] will cycle automatically/indefinitely until the settings are changed back to Residential mode.

TROUBLESHOOTING

Diagnosing Specific Problems

<u>Problem</u>	<u>Possible Cause</u>	<u>Remedy</u>
1. The pump does not run when push button is pressed	<p>A. No power at electrical outlet</p> <p>B. You've plugged the controller into an electrical outlet controlled by a wall switch, (such as the outlet under many kitchen sinks that controls the garbage disposal)</p> <p>C. Power cord is not securely installed into the pump controller</p> <p>D. Wire to push button is not connected properly</p> <p>E. The temperature setting is already sensing "hot" water, so the pump is not being activated</p>	<ul style="list-style-type: none"> • Plug the controller into a "hot" outlet • Reconnect pump power cord to female receptacle in D'MAND KONTROLS® controller • Shut off power, then make sure wires have good contact • Call 1-800-200-1956 to reset sensitivity setting
2. The water is not hot enough	<p>A. Pump or valve was installed with water flow going in the wrong direction</p> <p>B. There is something in the piping that is blocking the flow of water</p>	<ul style="list-style-type: none"> • Check the arrow on the top of the pump to make sure it points in the correct direction (see page 6) • Check the piping for obstruction
3. There is hot water at the cold-water tap	<p>A. The temperature sensitivity setting now in place is too high, so the pump is not shutting down soon enough</p>	<ul style="list-style-type: none"> • Call 1-(800)-200-1956 for reset information
4. Water is not hot enough when pump shuts down	<p>A. The temperature sensitivity setting now in place is too low, so the pump is shutting down too soon</p>	<ul style="list-style-type: none"> • Call 1-(800)-200-1956 for reset information
5. There is hot water in the cold-water lines only	<p>A. The pump is installed backwards</p>	<ul style="list-style-type: none"> • Reinstall the pump correctly
6. Pump runs approx. 4 minutes & stops with no hot water present	<p>A. Air is trapped inside the pump</p>	<ul style="list-style-type: none"> • Remove both flex lines at the custom tees. Fill both flex lines with water and reconnect
7. Motion sensor not activating pump	<p>A. Circuit board not set to 12V inside D'MAND KONTROLS® Pump (Prior to 2016)</p>	<ul style="list-style-type: none"> • Settings must be changed • Call 1-(800)-200-1956
8. Motion Sensors not working	<p>A. Wiring may not be correctly color matched</p>	<p>Check all wiring colors, black to black, green to green, and red to red</p>

<p>9. Unable to pair a new Bluetooth Kit or other devices</p>	<p>A. Your smart device may already be connected to another device B. The device may not have been power cycled C. Wi-Fi may not be enabled D. May be out of range of devices</p>	<ul style="list-style-type: none"> ● Disconnect any Bluetooth device when pairing in ACT app ● Remove batteries or unplug for 30 seconds then try to pair again ● Ensure Wi-Fi is enabled on smart device ● Make sure you are within 20' of the ACT Blue Box and the device you are programming.
<p>10. System starts on its own after:</p> <p>A. New controller was paired B. Making changes in the app</p>	<p>A. The System may have a schedule already programmed B. One of the Modes (ie. 90% mode) may already be activated</p>	<ul style="list-style-type: none"> ● Review the modes and pre-programmed schedules within the app and delete any unwanted start times, if one of the Modes was activated without being prompted, choose the "Factory Reset" option at the bottom of the page within the app. This will reset all settings to default and allow you to set your own schedules and modes.
	<p>TECH SUPPORT</p> <p>1-(800)-200-1956</p>	



WARRANTY

ACT, Inc. D'MAND KONTROLS®

ACT, Inc. will replace without charge (at the Company's option) any D'MAND Kontrols® pump, valve, or component part which is proven defective under normal use. Warranty – (Five Years from date of purchase) Accessories: Hard-Wired Buttons, Wireless Transmitters and Receivers, all Hard-Wired or Wireless Motion Sensors and Receivers; Parts; Flex Lines and Tee's: Warranty – (One Year from date of purchase.) Labor is not included with Limited Warranty.

In order to obtain services under this warranty, it is the responsibility of the purchaser to promptly notify the Company in writing and promptly deliver the item in question, delivery prepaid to the factory. The address for notification and delivery is ACT, Inc. D'MAND Kontrols® Systems, 3176 Pullman Street, Suite 119, Costa Mesa CA 92626. If the product or part in question contains no defects as covered in the warranty, the purchaser will be notified and billed for parts and labor charges in effect at the time of factory examination and repair.

Any product or part not installed or operated in conformity with instructions, or which has been subject to misuse, misapplication, the addition of petroleum-based fluids or certain chemical additives to the system, or other abuse, will not be covered by this warranty.

Important Notice! In rare cases outdoor lawn sprinklers, Pool fillers/pumps, or hose bibs may cause pressure differences that can allow crossflow in the D'MAND Kontrols® System. Our patented (HSV) safety valve will be necessary to prevent crossflow from the water heater. Crossflow may void our warranty on the D'MAND Kontrols® System.

ACT, Inc. OFFERS THIS WARRANTY IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY IMPLIED BY LAW INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS IS IN EFFECT ONLY FOR THE DURATION OF THE EXPRESS WARRANTY SET FORTH IN THE PARAGRAPH ENTITLED "LIMITED WARRANTY" AS SHOWN ABOVE.

THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR STATUTORY, OR ANY OTHER WARRANTY OBLIGATION ON THE PART OF ACT, INC. D'MAND KONTROLS® SYSTEMS.

ACT, INC. D'MAND KONTROLS® SYSTEMS WILL NOT BE LIABLE FOR ANY SPECIAL INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF REMOVING OR REPLACING DEFECTIVE PRODUCTS.

This warranty gives you specific rights, and you may have other rights, which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or on the exclusion of incidental or consequential damages, so those limitations or exclusions may not apply to you.

Please refer to our website at www.gothotwater.com for warranty and indemnification information.

July 2021

ALL ACT2 MODEL PACKAGE CONTENTS

ACT2

Box Contents Includes:

- 1). One (1) Blue Control Box containing power cord with activation wires and anchor pack
- 2). A pre-assembled Controller/Circulator Pump Assembly
 - a. One (1) Stainless Steel Inlet Union with temperature sensor and washer
 - b. One (1) Stainless Steel Outlet Union with integral check valve and washer

1.



2.



ACT2-LED-B

Box Contents Includes:

The above two components, **plus** two (2) Hard-Wired LED Buttons



ACT2-BT

Box Contents Includes:

The above two components, **plus** two (2) Bluetooth Wireless Transmitters, two anchor packs, and one (1) Hard-Wired LED Button



ACT2-HWMS-O

Box Contents Includes:

The above two components, **plus** one (1) Hard-Wired Motion Sensor and one (1) Hard-Wired LED Button



ACT2-MS-BT

Box Contents Includes:

The above two components, **plus**, one (1) Bluetooth Wireless Motion Sensor, and one (1) Hard-Wired LED Button



ACT2-RETROFIT-BTKIT

Box Contents Includes:

The above two components, **plus** all the following:

- 1). Two (2) Bluetooth Wireless Transmitters
- 2). Two (2) Anchor Packs
- 3). One (1) Hard-Wired LED Button
- 4). Two (2) Custom Blue T fittings
- 5). Two (2) 1/2" FPT x 3/8" Male Comp Adapters
- 6). One (1) Pre-installed Mounting Bracket
- 7). Two (2) 18" x 3/4" Flex Lines
- 8). Two (2) 1/2" x 3/8" x 12" Flex Lines



ALL ACT2 MODEL PACKAGE CONTENTS

Box Contents Includes:

- 1). One (1) Blue Control Box with power cord, activation wires and anchor pack
- 2). A pre-assembled Controller/Circulator Pump Assembly
 - a. One (1) Stainless Steel Inlet Union with temperature sensor and washer
 - b. One (1) Stainless Steel Outlet Union with integral check valve and washer

1.



2.



ACT2-BT-LN

Box Contents Includes:

The above two components **only**



ACT2-BT-1T

Box Contents Includes:

The above two components, **plus** one (1) Bluetooth Wireless Transmitter and one (1) Bluetooth Anchor Pack



ACT2-BT-FX

Box Contents Includes:

The above two components, **plus** two (2) Bluetooth Wireless Transmitters, two (2) Bluetooth Anchor Packs, and two (2) ¾" x 18" Flex Lines, and one (1) Mounting Bracket



ACT2-LED-R

Box Contents Includes:

The above two components, **plus** two (2) LED Hard-Wired Rocker Switches



ACT2-BTR

Box Contents Includes:

The above two components, **plus** all the following:

- 1). Two (2) Custom Blue T fittings
- 2). Two (2) ½" FPT x ¾" Male Comp Adapters
- 3). One (1) Pre-installed Mounting Bracket
- 4). Two (2) 18"x ¾" Flex Lines
- 5). Two (2) ½" x ¾" x 12" Flex Lines

